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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/590,278	08/22/2006	Masaaki Hirano	050395-0387	8071
20277 7590 10/01/2009 MCDERMOTT WILL & EMERY LLP 600 13TH STREET, N.W. WASHINGTON, DC 20005-3096			EXAMINER HOFFMANN, JOHN M	
			ART UNIT	PAPER NUMBER
			1791	
			MAIL DATE	DELIVERY MODE
			10/01/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/590,278

Applicant(s)

HIRANO ET AL.

Examiner

John Hoffmann

Art Unit

1791

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 August 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) 1-13 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/ISD)
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date 8/22/2006, 5/11/2007

DETAILED ACTION

Election/Restrictions

Applicant's election of Group I in the reply filed on 8/25/2009 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Claims 11-13 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 8/25/2009.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-5 and 7-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Uchiyama 4813989

Claim 1: The first five lines of present claim 1 is clearly anticipated by Uchiyama, for example at col.1, lines 8-15 and col. 2, lines 32-40. 9 is (or has) an exhaust portion and 8 is (or has) a buffering gas inlet portion. They are connected - at least indirectly - to the silica glass pipe 1. The buffering gas is feedback controlled by feature 11.

As to the "pattern control" according to a flow rate pattern corresponding to heating positions. It is inherent that the amounts of each gas used in Uchiyama is

according to the pattern of everything – including a flow pattern and heating positions. That is: as simple matter of conservation of mass, what goes in = the amount deposited + the amount exhausted. And the amount deposited is controlled (at least in part) by the pattern of flow, and the heating positions. Rearranging the equation: the amount exhausted= The amount of material inputted - the amount deposited.

Examiner considers the various amounts to be for the entire process. That is claim stipulates a "step of depositing a glass layer". Examiner considers the step as 'comprising' the depositing a layer - thus can encompass depositing all the layers.

Claim 2: As per col. 3, lines 9-11 there is a target value that is used for each heating position. Although 7 is not shown being connected directly to the tube, col. 2, lines 47 describes it being "at the other end of reaction tube 1". It is deemed that this would measure "the internal pressure". Examiner notes that for gas to flow there needs to be a pressure gradient - thus applicant has a pressure gradient in the tube - however slight. By applicant's choice of "the internal pressure", rather than "a" pressure, it is clear applicant did not intend the claims to be narrowly construed to be a specific pressure, rather it can be any pressures (which are slightly different) and thus would reasonably read on the pressure detected at the other end - as Uchiyama discloses.

Claim 3: As per col. 3, line 14-18 and col. 1, lines 29-32, that Uchiyama measured a dimension at least at two positions that were heated. The control is deemed to be such that it may become a predetermined dimension - or it may not. Such is clearly an intended use that does not define over the process of Uchiyama. Claim 5 is clearly met.

As to claim 4: Uchiyama uses a values of 10 mm of water over atmospheric. It is not stated how such was obtained. According to examiner's dictionary, one definition for "calculate" is to *design or adapt for a purpose*. It is clear that Uchiyama designed or adapted his pressure for a purpose.

Claim 7 refers to "the ratio" and "a control range" - however nowhere is either of these explicitly recited. Thus rather than construing an inherent control range in the claim 1 process, Examiner interprets claim 7 to only limit those situations where there is a control range. Since Uchiyama does not disclose a control range, claim 7 does not serve to define over Uchiyama.

Claim 8 : see col.3, lines 15-17.

Claim 9: Uchiyama discloses keeping the pressure constant- thus the rate of change would be 0 Pa per second.

Claim 10: the pressure is always at least atmospheric, thus Uchiyama has a duration of 0.

Claim Rejections - 35 USC § 103

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Uchiyama.

Uchiyama does not disclose the deposition rate. It would have been obvious to deposit the glass as fast as possible, so as to make the preform (and thus the fiber) as fast as possible.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 2, 4 and 7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 2 refers to a target value. But claim 4 refers to a preferable value for the pressure. It is unclear what the difference is between these values. Generally one would consider them to be the same thing. Examiner could find nothing in the specification which seems to explain what either of these is. Moreover claim 4 recites that the preferable value is 'necessary' to the desired sized. Examiner fails to see in what way the value is 'preferred'.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Gansicke, Modone, Mueller (all three), Rousseau, Glodis, DiGiovanni, Regnier, Partus, Tsumura and Kim are cited as being cumulative to Uchiyama.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Hoffmann whose telephone number is (571) 272 1191. The examiner can normally be reached on Monday through Friday, 7:00- 3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steve Griffin can be reached on 571-272-1189. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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